

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009354**Date Inspected:** 28-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Xu Xian Ping	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG / Tower Subassemblies	

**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Stefan Holmes was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China.

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #001 located on Traveller Rail 10TR2-021. Welder is identified as 068858. ZPMC QC is identified as Li Yong. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2-F.

FCAW process welding of weld joint #002 located on Traveller Rail 10TR2-021. Welder is identified as 2053901. ZPMC QC is identified as Li Yong. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2-F.

FCAW process welding of weld joint #001 located on Traveller Rail 10TR2-022. Welder is identified as 068858. ZPMC QC is identified as Li Yong. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2-F.

FCAW process welding of weld joint #002 located on Traveller Rail 10TR2-022. Welder is identified as 2053901. ZPMC QC is identified as Li Yong. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2-F.

FCAW process welding of weld joint #001 located on Traveller Rail 10TR1-026. Welder is identified as 215009. ZPMC QC is identified as Li Yong. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2-F.

FCAW process welding of weld joint #002 located on Traveller Rail 10TR1-026. Welder is identified as 217185. ZPMC QC is identified as Li Yong. The welding variables recorded by QC appeared to comply with the

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WPS-B-T-2231-B-U2-F.

FCAW process welding of weld joint #001 located on Traveller Rail 10TR1-027. Welder is identified as 215009. ZPMC QC is identified as Li Yong. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2-F.

FCAW process welding of weld joint #002 located on Traveller Rail 10TR1-027. Welder is identified as 217185. ZPMC QC is identified as Li Yong. The welding variables recorded by QC appeared to comply with the WPS-B-T-2231-B-U2-F.

FCAW process welding of weld joint #148 located on Cross Beam CB202G-020. Welder is identified as 053609. ZPMC QC is identified as Liu Fa Wen. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132.

FCAW process welding of weld joint #166 located on Cross Beam CB202G-019. Welder is identified as 053742. ZPMC QC is identified as Li Yong. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132.

FCAW process welding of weld joint #166 located on Cross Beam CB202G-020. Welder is identified as 053609. ZPMC QC is identified as Liu Fa Wen. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132.

FCAW process welding of weld joint #148 located on Cross Beam CB202G-019. Welder is identified as 053742. ZPMC QC is identified as Li Yong. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132.

FCAW process welding of weld joint #036 located on Floor Beam FB3043-001. Welder is identified as 054203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-3.

FCAW process welding of weld joint #059 located on Floor Beam FB3093-001. Welder is identified as 045203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-3.

FCAW process welding of weld joint #026 located on Floor Beam FB3012-001. Welder is identified as 045203. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-3.

FCAW process welding of weld joint #023 located on Floor Beam FB3026-001. Welder is identified as 203871. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-3.

FCAW process welding of weld joint #050 located on Floor Beam FB3026-001. Welder is identified as 203871. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS-B-T-2232-TC-U4b-F.

FCAW process welding of weld joint #028 located on Floor Beam FB3025-001. Welder is identified as 206358. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-3.

### Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as TOWER Components. The weld designations reviewed are as follows:

1. Tower Strut Angle - ND1-SA658-53M-5-1A/B.
2. Tower Strut Angle - ND1-SA658-53M-3-1A/B.

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3. Tower Strut Angle - ND1-SA658-53M-14-1A/B.
4. Tower Strut Angle - ND1-SA658-53M-6-1A/B.
5. Tower Strut Angle - ND1-SA658-53M-1-1A/B.
6. Tower Strut Angle - ND1-SA658-53M-2-1A/B.
7. Tower Strut Angle - ND1-SA658-53M-7-1A/B.
8. Tower Strut Angle - ND1-SA658-53M-9-1A/B.
9. Tower Strut Angle - ND1-SA658-53M-13-1A/B.
10. Tower Strut Angle - ND1-SA658-53M-12-1A/B.
11. Tower Strut Angle - ND1-SA658-53M-8-1A/B.
12. Tower Strut Angle - ND1-SA658-53M-11-1A/B.
13. Tower Strut Angle - ND1-SA658-53M-4-1A/B.
14. Tower Strut Angle - ND1-SA658-53M-10-1A/B.
15. Tower Strut Angle - ND1-SA658-53M-16-1A/B.
16. Tower Strut Angle - ND1-SA658-77M-11-1A/B.
17. Tower Strut Angle - ND1-SA658-77M-4-1A/B.
18. Tower Strut Angle - ND1-SA658-77M-16-1A/B.
19. Tower Strut Angle - ND1-SA658-77M-14-1A/B.
20. Tower Strut Angle - ND1-SA658-77M-15-1A/B.
21. Tower Strut Angle - ND1-SA658-77M-6-1A/B.
22. Tower Strut Angle - ND1-SA658-77M-13-1A/B.
23. Tower Strut Angle - ND1-SA658-77M-3-1A/B.
24. Tower Strut Angle - ND1-SA658-77M-9-1A/B.
25. Tower Strut Angle - ND1-SA658-77M-2-1A/B.
26. Tower Strut Angle - ND1-SA658-77M-10-1A/B.
27. Tower Strut Angle - ND1-SA658-77M-1-1A/B.
28. Tower Strut Angle - ND1-SA658-65M-16-1A/B.
29. Tower Strut Angle - ND1-SA658-65M-15-1A/B.
30. Tower Strut Angle - ND1-SA658-65M-4-1A/B.
31. Tower Strut Angle - ND1-SA658-65M-5-1A/B.
32. Tower Strut Angle - ND1-SA658-65M-7-1A/B.
33. Tower Strut Angle - ND1-SA658-65M-13-1A/B.
34. Tower Strut Angle - ND1-SA658-65M-9-1A/B.
35. Tower Strut Angle - ND1-SA658-65M-14-1A/B.
36. Tower Strut Angle - ND1-SA658-65M-6-1A/B.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

### Summary of Conversations:

No relevant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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**Inspected By:** Holmes,Stefan

Quality Assurance Inspector

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**Reviewed By:** Patterson,Rodney

QA Reviewer